Technical Data Sheet Aerospace Coatings



PAC33 Polyurethane Primer

Product Description

PAC33 is a two component, corrosion inhibitive, polyurethane primer modified with epoxy resin. PAC33 is designed for use with aerospace paint systems.

- Excellent corrosion resistance
- Designed for ambient curing
- High chemical resistance and flexibility
- Designed for use over P99 wash primer
- Compatible over pre-treated alloy for interior and exterior parts

Components



Mix Ratio (by volume)

4355/3600 (Base)
 0701/9000 (Activator)
 0433/9000 (Thinner)
 5 parts
 1 part
 4-5 parts

Specifications

PAC33 is qualified to the following OEM specifications:



- AIMS 04-04-012
- ASNA 4248
- BLGG 140101

- HMDC0054
- MDL 5039
- RPS 611

Product Compatibility

PAC33 is compatible with the following:

- Sulfo-chromic or anodised pre-treated aluminium
- P99 etch primer to AIMS 04-04-012
- Polyurethane topcoat to AIMS 04-04-003 & AIMS 04-04-012

Note: PPG Aerospace recommends you check the most recent specification QPLs for updated information.

Surface Preparation and Pretreatment



Ensure that the correct surface pre-treatment has been carried out, and that drying and overcoat times are observed. Ensure the surface is clean, dry and intact using high performance solvent cleaner - DeSoto[®] CN20 or Desoclean[™] 45 solvent cleaner are recommended.

Instructions for Use



Ensure all mixing and measuring containers are clean and free from contamination. Hand stir or mechanically agitate base material until all components are uniformly dispersed. Add activator to base, mix thoroughly and thin to recommended viscosity using approx. 4-5 volumes of thinner.

Note: All products and components should be placed in ambient conditions of 15-35°C (59-95°F) for at least 24 hours prior to mixing and application.



Induction Time:

Not required

Viscosity: (21 - 25°C / 70 - 77°F)

•	AFNOR2.5	45 - 55 seconds
•	AFNOR4	14 - 16 seconds
•	BSB3	26 - 29 seconds
•	BSB4	14 - 17 seconds
•	FORD4	12 - 15 seconds
•	ISO3	41 - 59 seconds
•	ISO4	15 - 22 seconds
•	ZAHN2	15 - 19 seconds

Note: Viscosities quoted are typical ranges obtained when using specified mix ratio.



Pot Life:

8 hours @ 21 - 25°C (70 - 77°F)

Application Guidelines

Recommended Application Conditions:

Temperature 15 - 35°C (59 - 95°F) Relative Humidity 35 - 70%

Application:

Apply a double track coat or one wet coat with 50% overlap to achieve recommended dry film thickness of 15-25 μ m. Avoid applying higher film thicknesses as this can create orange peel and possible intercoat adhesion failures.



Theoretical Coverage: (ready for use)

8 - 9 m² Lt @ 20 μm dry film thickness 320 - 360 ft² US gal @ 0.8 mil dry film thickness

Recommended Dry Film Thickness:

15 - 25 µm 0.6 - 1 mil



Dry Film Density:

1.7 g/cm³ 14 lbs/US gal

Dry Film Weight:

34 g/m 2 @ 20 µm dry film thickness 0.006 lbs/ft 2 @ 0.8 mil dry film thickness

Note: These application guidelines represent PPG's best advice for usage in standard conditions. Some parameters will be influenced by environmental conditions, equipment settings, and other variables.





Equipment	Tip Size	Flow Rate	Air Pressure	
Airmix Kremlin	Ø = 0.28mm – Angle 60° Ref: 06.134	320 to 360 ml/min	725 to 870 psi (50 to 60 bar)	
HVLP	1.2 mm		22 to 29 psi (1.5 to 2 bar)	
Conventional Air Spray	1.5 mm		43 to 58 psi (3 to 4 bar)	
Airless	Not Recommended			
Airless Air-assisted	609 to 611	360 ml/min	725 to 870 psi (50 to 60 bar)	
PRO 3500 or Pro XS4	1.2 to 1.5 mm	360 ml/min	72 to 87 psi (5 to 6 bar)	

Equipment Cleaning:

Clean spray equipment before use and as soon as possible after use. DeSoto[®] CN20, CN44 or Desoclean[™] 45 solvent cleaners are recommended.

Physical Properties



Colour:

Green



Gloss:

Not Applicable

Drying Times @ 50 % R.H.	23°C (73°F)	60°C (140°F)	80°C (176°F)	100°C (212°F)
Dust Free	30 minutes			
Dry to Handle	1 hour			
Dry to Mask	2 hours			20 minutes
Dry to Sand	2 hours			
Dry to Overcoat with topcoat CA8000,CA8800 or 9008 BC	1 hour (min.) 72 hours (max.)			
Dry to 00vercoat with 7049 or CA7002 Primer	4 hours (min.) 72 hours (max.)			
Dry to Overcoat	1 hour (min.) 72 hours (max.)			
Dry to Fly	48 hours (min.)			
Full Cure	7 days	2 hours	1.5 hours	



Note: Drying times listed above are dependent upon film thickness applied, air flow conditions and application technique.



Flash Off Time:

20 minutes at 23°C (73°F) prior to accelerated cure.



VOC: (ASTM)

 Mixed ready for use
 730 g/Lt

 4355/ Base Component
 700 g/Lt

 0701/9000 Activator
 270 g/Lt

 0433/9000 Thinner
 880 g/Lt



Flash Point:

 4355/3600 Base Component
 2°C (36°F)

 0701/9000 Activator
 42°C (108°F)

 0433/9000 Thinner
 4°C (39°F)

Shelf Life:

4355/3600 Base Component 24 months in original unopened container 24 months in original unopened container 24 months in original unopened container 10 years in original unopened container

<u>Note:</u> The application and performance property values above are typical for the material, but not intended for use in specifications or for acceptance inspection criteria because of variations in testing methods, conditions and configurations.

Storage Recommendations



Inspect the condition of the container to ensure compliance. The material should be stored at temperatures between 5°C to 35°C (41°F to 95°F) to ensure shelf life.

Note: When procuring to a qualified material specification, follow those storage instructions.

Health Precautions

This product is safe to use and apply when recommended precautions are followed. Before using this product, read and understand the Safety Data Sheet (SDS), which provides information on health, physical and environmental hazards, handling precautions and first aid recommendations. An SDS is available on request. Avoid overexposure. Obtain medical care in case of extreme overexposure.

For industrial use only. Keep away from children.

Additional information can be found at: www.ppgaerospace.com
For sales and ordering information call the local PPG office at the numbers listed below:

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ASC – Australia Tel 61 (3) 9335 1557 Fax 61 (3) 9335 3490

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